

HP OpenView Storage Data Protector installation instructions



Single Server Edition for Windows

Installing Data Protector with the
hp StorageWorks 1/8 Tape Autoloader

*Read instructions completely before
beginning the installation process*



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HP OpenView Storage Data Protector

Data Protector is the latest generation of HP OpenView software that delivers new levels of recovery in a service-driven management approach.

Data Protector works with the HP StorageWorks 1/8 Tape Autoloader to automate the routine tasks of backup and recovery processes. It keeps track of all media and data so you can easily recover information in case of a system failure, disaster, or accidental deletion.

What do I get?

- Automated data protection and media management for one Windows server
- Centralized backup and restore of an unlimited amount of Microsoft™ Windows™ 95/98/ME/NT/2000/XP/2003 Server workstations
- Automatic device configuration
- Full, incremental, and differential backup
- Fast and easy single-file restore
- Built-in scheduling
- Data compression
- Error notification
- Sophisticated Web reporting
- Entry-level access to Web support via <http://www.openview.hp.com/services>
- For further information on Data Protector, please visit: <http://www.hp.com/go/dataprotector>
- For Data Protector manuals, please visit: http://ovweb.external.hp.com/lpe/doc_serv/

How do I get a Data Protector license?

To get a Data Protector license, you will first need to know the permanent IP address of the backup server.

To get the license, do the following:

- Download Data Protector by accessing: <http://www.openview.hp.com/products/datapro/download.html> for a 60-day trial version license.
- To get your permanent license, access <http://www.webware.hp.com/welcomepassword.asp> Your order number is: HPBB12BUNDLE1001.

How do I get additional functionality?

For additional functionality, such as:

- An unlimited number of servers
- Centrally managed multi-site, heterogeneous SAN and NAS environments
- Disaster recovery alternatives
- Integration with OpenView

contact your local reseller for the migration number to the full version of Data Protector, part number B7031AA, or go online to <http://www.openview.hp.com/buy/>

How do I get additional support information?

Access http://support.openview.hp.com/support_options.jsp for telephone numbers and free upgrades.

Model types


These installation instructions are applicable to the following HP StorageWorks 1/8 Tape Autoloader models:

- HP StorageWorks 1/8 Ultrium 960 Tape Autoloader
- HP StorageWorks 1/8 Ultrium 448 Tape Autoloader
- HP StorageWorks 1/8 Ultrium 460 Tape Autoloader
- HP StorageWorks 1/8 Ultrium 230 Tape Autoloader
- HP StorageWorks 1/8 DLT VS80 Tape Autoloader
- HP StorageWorks 1/8 SDLT 320 Tape Autoloader

Installing Data Protector with the HP StorageWorks 1/8 Tape Autoloader

To install Data Protector:


1. After downloading the Data Protector file(s) from the Web, create a directory called `dpinstall`.
2. Open the downloaded file(s) and unzip them to the `dpinstall` directory.
3. Log in as **Administrator** or as a user who is a member of **Administrators and Backup Operators**.
4. Run `dpinstall\i386\autorun.exe`.
5. When asked for installation type, select **Cell Manager**.
6. On the **Custom Setup** screen, change the path (if necessary) and accept the default components.


 **NOTE:** If you are going to backup remote clients, you can do so by using the Data Protector Installation Server. Refer to the *HP OpenView Storage Data Protector Installation and Licensing Guide* for more information.

Licensing Data Protector

1. Obtain the **Permanent Password Certificate** from the Web. A static IP address must be given to the Data Protector Cell backup server before obtaining the license.
2. Run the **Data Protector Cell Manager**.
3. From the pull-down menu in the upper left of the screen, select **Clients**.
4. Right-click on **Data Protector Cell** in the left-hand column. Select **Add License**.
5. Type in the permanent password exactly as shown on the certificate.
6. Click **OK**.

Configuring Data Protector with the HP StorageWorks 1/8 Tape Autoloader

 **NOTE:** Data Protector supports native tape drivers that are loaded by default for an enabled tape drive attached to a Windows system. The Windows 2000/XP/Server 2003 native drivers loaded for Medium changers (robotics) devices are not supported by Data Protector. Disable these drivers using Windows Device Manager. Refer to the *HP OpenView Storage Data Protector Installation and Licensing Guide* for more information.

 **NOTE:** Confirm that you have the latest Data Protector SCSI Tab file installed on your host system. The SCSI Tab is needed for the device auto configuration. To download this SCSI Tab file, go to http://www.openview.hp.com/products/storage_data_protector/device_matrices/SCSITab51.zip

Auto and manual configuration


There are two methods of configuring Data Protector; Auto Configuration and Manual Configuration.

The following **Auto Configuration** process is applicable to all HP StorageWorks 1/8 Tape Autoloader models.

For **Manual Configuration**, please select and follow the process for your specific Tape Autoloader model (see "[Manual configuration for the HP StorageWorks 1/8 Ultrium 960, Ultrium 448, Ultrium 460, and Ultrium 230 Tape Autoloaders](#)", or "[Manual configuration for the HP StorageWorks 1/8 DLT VS80, and SDLT 320 Tape Autoloaders](#)").

Auto configuration for all 1/8 Tape Autoloader models

1. Run **Data Protector Manager**.
2. Close the **Next Step** wizard.
3. Select **Device and Media** from the pull-down menu in the upper left of your screen.
4. Right-click on **Devices** in the left hand column. Select **Auto Configure Devices**.
5. On the next window, click on the + next to the client that the autoloader is connected to.
6. Put a check mark in the box next to **HP-ThinStor 1/8 Autoloader**.
7. Click **Finish**.

 **NOTE:** To set up and schedule backups, refer to the *HP OpenView Storage Data Protector Installation and Licensing Guide*.

Manual configuration for the HP StorageWorks 1/8 Ultrium 960, Ultrium 448, Ultrium 460, and Ultrium 230 Tape Autoloaders


1. Run the **Data Protector Manager**.
2. From the **Next Step** wizard, select **Configuring a Device**. If the **Next Step** wizard does not display, use the pull-down menu in the upper left of your screen to select **Devices and Media**.
 - a. Right-click **Devices** in the left-hand column.
 - b. Select **Add Device**.
3. Fill in the first form as follows:
 - a. **Device Name:**
(for Ultrium 960) ThinStor Ultrium3
(for Ultrium 448 and 460) ThinStor Ultrium2
(for Ultrium 230) ThinStor Ultrium
 - b. **Description:** (optional)
 - c. **Client:** select the client to which the device is attached by using the pull-down menu.
 - d. **Device type:**
(for the Ultrium 960 and 448) SCSI-III Library
(for the Ultrium 460 and 230) SCSI-II Library
 - e. **Interface type:**
(for the Ultrium 960 and 448) SCSI-III
(for the Ultrium 460 and 230) SCSI-II
4. Use the pull-down menu to select the device named HP:ThinStor AutoLdr for the SCSI address of the library robotic.
5. Select **Abort for Busy Drive Handling**.
6. Click **Next** on the **Specify the Slots** screen. There should be eight slots displayed.
7. Select LTO-Ultrium on the **Specify Media Type** screen. Click **Finish**.
8. Click **Yes** to **Configure the Drive Now**.
9. Fill in the first form as follows:
 - a. **Device Name:**
(for the Ultrium 960) Ultrium3 drive
(for the Ultrium 448 and 460) Ultrium2 drive
(for the Ultrium 230) Ultrium drive
 - b. **Description:** (optional)
 - c. **Client:** select the client to which the device is attached by using the pull-down menu.
 - d. **Data Format:** Data Protector
10. For the SCSI address of the data drive, select the device named:
(for the Ultrium 960) HP: Ultrium 3-SCSI
(for the Ultrium 448 and 460) HP: Ultrium 2-SCSI
(for the Ultrium 230) HP: Ultrium 1-SCSI
Confirm that **Hardware Compression** is checked.
11. Set drive index to **1**, and click **Next**, leaving the **Direct Backup** section un-selected.
12. Use default LTO-Ultrium as the default media pool.
13. Click on **Advanced Options** and check **CRC Check** and **Detect Dirty Drive**.
14. Click **OK**.
15. Click **Finish**. If your system asks you if you want to create another drive for the new library, click **No**.

Manual configuration for the HP StorageWorks 1/8 DLT VS80, and SDLT 320 Tape Autoloaders

1. Run the **Data Protector Manager**.
2. From the **Next Step** wizard, select **Configuring a Device**. If the **Next Step** wizard does not display, use the pull-down menu in the upper left of your screen to select **Devices and Media**.
 - a. Right-click **Devices** in the left-hand column.
 - b. Select **Add Device**.
3. Fill in the first form as follows:
 - a. **Device Name:**
(for the DLT VS80) ThinStor VS80
(for the SDLT 320) ThinStor SDLT320
 - b. **Description:** (optional)
 - c. **Client:** select the client to which the device is attached by using the pull-down menu.
 - d. **Device type:** SCSI-II Library
 - e. **Interface type:** SCSI II
4. Use the pull-down menu to select the device named HP:ThinStor AutoLdr for the SCSI address of the library robotic. (If more than one HP StorageWorks 1/8 Autoloader is connected, be sure to select the correct one.)
5. Select **Abort for Busy Drive Handling**.
6. Click **Next** on the **Specify the Slots** screen. There should be eight slots displayed.
7. Select:
(for the DLT VS80) DLT
(for the SDLT 320) SuperDLT
on the **Specify Media Type** screen. Click **Finish**.
8. Click **Yes** to **Configure the Drive Now**.
9. Fill in the first form as follows:
 - a. **Device Name:**
(for the DLT VS80) DLT VS80 drive
(for the SDLT 320) SDLT320 drive
 - b. **Description:** (optional)
 - c. **Client:** select the client to which the device is attached by using the pull-down menu.
 - d. **Data Format:** Data Protector
10. For the SCSI address of the data drive, select the device named:
(for the DLT VS80) HP: DLT VS80
(for the SDLT 320) COMPAQ: SDLT320
Confirm that **Hardware Compression** is checked.
11. Set drive index to **1**, and click **Next**, leaving the **Direct Backup** section un-selected.
12. Use default:
(for the DLT VS80) DLT
(for the SDLT 320) SuperDLT
as the default media pool.
13. Click on **Advanced Options** and check **CRC Check** and **Detect Dirty Drive**.
14. Click **OK**.
15. Click **Finish**. If your system asks you if you want to create another drive for the new library, click **No**.

Installation and troubleshooting tips


- All Import **[Enter]** and Export **[Exit]** functions must be executed from the front panel of the autoloader. Attempts to Import or Export from Data Protector (or any other backup software) will cause the software to fail.
- After all Import and Export operations have been completed from the front panel, a **[Scan]** (from the **Slots** screen in Data Protector) must be completed. If the slots are not scanned, Data Protector may exhibit unusual behavior because inventory data may not match the actual inventory in the autoloader.
- Do **NOT** perform an Import or Export operation from the front panel of the autoloader while Data Protector (or any other software) is running a backup. Doing this will cause the backup to fail and Data Protector will not unload the tape at the end of the backup. If this situation occurs, manually unload the tape using the front panel. complete a Data Protector scan (from the **Slots** screen) on the slot(s) that were involved in the Import and/or Export, then manually start the backup again.

 **NOTE:** Any future scheduled backups will not start until the tape has been unloaded and the backups have been manually restarted.

- When using Data Protector, tapes are formatted using the default configurations in a VS 80 drive, the software defaults to a native capacity of 20 GB instead of 40 GB. If you look at **Media Properties** and then the **Usage** tab, the pie chart will display that the maximum capacity as 20 GB until 20 GB is exceeded. At this point, the pie chart will display as full with the amount of data that has been backed up.
- Data Protector may display the error code [90:123] during drive operations (see Table 1). This is because the HP StorageWorks VS 80 1/8 Tape Autoloader has not been added to an internal database of supported products. This will have no bearing on backup or restore operations. To solve this problem, confirm that you have the latest Data Protector SCSITab file installed on your host system. The SCSITab is important as this is needed for the device auto configuration. To download this SCSITab file, go to http://www.openview.hp.com/products/storage_data_protector/device_matrices/SCSITab51.zip
- If you initiate a Backup with Data Protector and get the error code **[90:54]**, followed by **[90:64]**, it could be caused by a dirty drive. Clean the drive and retry the backup.
- If you initiate a scan with Data Protector and get one of the following error codes: **[90:180]**, **[65:48]**, **[90:56]**, or **[90:64]**, the drive needs to be cleaned. Clean the drive and retry the operation.

Table 1 Error Codes

Error Code	Description	Details
65:48	Cleaning tape requested by device	Drive name in V, please clean the drive
90:54	Cannot open device	The medium is write protected
90:56	Cannot close device	Details unknown
90:64	Cannot unload exchanged medium [1117]	The request could not be performed because of an I/O device error
90:123	Unknown device	Please check device support matrix
90:180	Cannot rewind medium	Medium error

 **NOTE:** To set up and schedule backups, refer to the *HP OpenView Storage Data Protector Installation and Licensing Guide*.